

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA

BROADCOM CORPORATION, et al.,
Plaintiffs,
v.
NETFLIX INC.,
Defendant.

Case No. [3:20-cv-04677-JD](#)

**ORDER RE JUDGMENT ON THE
PLEADINGS**

Plaintiffs Broadcom Corp. and Avago Technologies (Broadcom) sued defendant Netflix Inc. (Netflix) for infringement of twelve patents related to video streaming. Dkt. No. 208. Netflix seeks judgment on the pleadings under Federal Rule of Civil Procedure 12(c) on the sixth, tenth, and eleventh claims for relief in Broadcom's third amended complaint (TAC), which relate to U.S. Patent No. 8,572,138 (the '138 patent), U.S. Patent No. 8,548,976 (the '976 patent), and U.S. Patent No. 7,457,722 (the '722 patent), respectively. Netflix says that the asserted claims of these three patents are directed to patent-ineligible subject matter under 35 U.S.C. § 101. Dkt. No. 287.

This is the fourth eligibility motion that the Court has decided with respect to the patents-in-suit in this case. *See* Dkt. Nos. 160, 205, 259. The tenth and eleventh claims in the TAC for the '976 and '722 patents, respectively, are dismissed under Section 101 and *Alice Corp. Pty. Ltd. v. CLS Bank International*, 573 U.S. 208 (2014), with leave to amend. Dismissal of the sixth claim for relief, which relates to the '138 patent, is denied.

BACKGROUND

I. THE '722 PATENT

The '722 patent was issued on November 25, 2008, and is assigned to Avago, which currently holds all substantial rights, title, and interest in the '722 patent. Dkt. No. 208 ¶¶ 323-24.

The patent is directed to a “system and method for performance monitoring including instance life cycle event monitoring.” Dkt. No. 208-11 at 1:53-54. As the background to the patent states: “In the information technology (IT) departments of modern organizations, one of the biggest challenges is meeting the increasingly demanding service levels required by users. . . . As a result, the importance of monitoring and maintaining the quality of computational services has increased dramatically.” *Id.* at 1:12-20. The patent is said to improve monitoring within the context of “distributed computing environments,” which build on the computational power and resources of multiple devices. Dkt. No. 208 ¶¶ 329-32.

The parties treat Claim 1 as representative. Dkt. No. 287 at 3; Dkt. No. 296 at 4-6. The Court will follow suit. *See Broadcom Corp. v. Netflix Inc.*, No. 20-cv-04677-JD, 2022 WL 3155410, at *1 (N.D. Cal. Aug. 8, 2022) (hereinafter *Broadcom III*).

Claim 1 recites:

1. A method, comprising:
 - collecting performance data for one or more application instances, wherein the performance data is associated with the performance of said one or more application instances, wherein each application instance is a computer program executing on a computer system;
 - detecting one or more instance life cycle events associated with said one or more application instances, wherein said one or more instance life cycle events comprise at least one of: the creation of at least one of said one or more application instances, the destruction of at least one of said one or more application instances, and the migration of at least one of said application instances;
 - correlating said performance data to said one or more instance life cycle events; and
 - storing the correlated performance data.

Dkt. No. 208-11 at 9:64-67; 10:1-13.

II. THE '976 PATENT

The '976 patent was issued on October 1, 2013, and is assigned to Avago, which currently holds all substantial rights, title, and interest in the '976 patent. Dkt. No. 208 ¶¶ 287, 289. The patent is directed to “an improvement in the functionality of complex computer networks and how software services are delivered using the computational resources within those networks.” *Id.*

¶ 291. It relates to the problem of distributing traffic among “[s]ervers that run web services,” which “generally have a load capacity indicating the quantity of load [web service use] the server can handle.” Dkt. No. 208-10 at 1:64-65. An overloaded server “may stop handling requests for web services” and “may also cease functioning.” *Id.* at 1:67; 2:1-3.

At this juncture, Broadcom asserts only claims 9 and 22 of the ’976 patent. *See* Dkt. No. 296 at 8; Dkt. No. 264 at 2 n.4. Claim 9 is dependent on claim 1. The parties agree that claim 22 is the system version of claim 9, and Broadcom acknowledges that “claim 9 is representative of claim 22 for purposes of this Motion.” Dkt. No. 296 at 8 n.3.

Claims 1 and 9 recite:

1. A method for connecting to a web service, the method comprising:
 - selecting a web service;
 - selecting a server among one or more servers capable of running the selected web service, the selected server being selected independent of input from a requesting application subsequent to selection of the web service;
 - determining a real address for the selected web service running on the selected server;
 - and connecting to the selected web service running on the selected server using the determined real address.
9. The method of claim 1, wherein selecting a server among one or more servers capable of running the selected web service comprises:
 - becoming aware of the status of a primary server of the one or more servers capable of running the selected web service;
 - selecting the primary server when the primary server has a status of functional;
 - and selecting a secondary server of the one or more servers capable of running the selected web service when the primary server has a status of non-functional.

Dkt. No. 208-10 at 8:54-62, 9:13-21.

III. THE ’138 PATENT

The ’138 patent was issued on October 29, 2013, and is assigned to Avago, which holds all substantial rights, title, and interest in the ’138 patent. Dkt. No. 208 ¶¶ 190-91. The patent is directed to a “distributed computing system that conforms to a multi-level, hierarchical organizational model,” in which “[o]ne or more control nodes provide for the efficient and

1 automated allocation and management of computing functions and resources within the distributed
2 computing system in accordance with the organization model.” Dkt. No. 208-6 at 1:37-43.

3 The inventors describe the challenge of organizing, deploying, and administering a
4 distributed computing system “within an enterprise environment,” which “often includes several
5 business groups, and each group may have competing and variable computing requirements.” *Id.*
6 at 1:26-33. The invention disclosed by the patent is said to solve the technical problems
7 associated with traditional distributed computing systems “by developing an infrastructure
8 management facility (‘IMF’) that guarantees reliable and efficient application service delivery
9 independent of the computational infrastructure.” Dkt. No. 208 ¶ 195. “The IMF includes the
10 implementation of virtual machine managers” responsible for managing virtual machines that
11 “appear on the network as available resources as if they were independent computing resources
12 that can be accessed by various groups and utilized to suit their highly-diverse and specialized
13 computing needs.” *Id.*

14 The parties’ briefing focuses on Claim 1, but Broadcom asserts that Claims 11 and 14
15 “include further limitations that improve computer functionality and must be considered separately
16 in the eligibility analysis.” Dkt. No. 296 at 14; *see also* Dkt. No. 287 at 11-15. At the hearing on
17 this motion, Broadcom and Netflix agreed that Claim 11 could be treated as a representative claim.
18 *See* Dkt. No. 312 at 29. Claims 11 and 14 are dependent on Claim 9.

19 Claims 1, 9, 11, and 14 recite:

- 20 1. A distributed computing system comprising:
 - 21 a software image repository comprising non-transitory,
22 computer-readable media operable to store:
 - 23 (i) a plurality of image instances of a virtual machine
24 manager that is executable on a plurality of application
25 nodes, wherein when executed on the applications
26 nodes, the image instances of the virtual machine
27 manager provide a plurality of virtual machines, each
28 of the plurality of virtual machine operable to provide
an environment that emulates a computer platform,
and
 - (ii) a plurality of image instances of a plurality of software
applications that are executable on the plurality of
virtual machines; and

a control node that comprises an automation infrastructure to provide autonomic deployment of the plurality of image instances of the virtual machine manager on the application nodes by causing the plurality of image instances of the virtual machine manager to be copied from the software image repository to the application nodes and to provide autonomic deployment of the plurality of image instances of the software applications on the virtual machines by causing the plurality of image instances of the software applications to be copied from the software image repository to the application nodes.

9. The distributed computing system of claim 1, wherein the control node further comprises one or more rule engines that provide autonomic deployment of the software applications to the virtual machines in accordance with a set of one or more rules.

11. The distributed computing system of claim 9, wherein the automation infrastructure automatically updates the one or more rules engines to automatically control the deployment of the software applications to the application nodes in accordance with the current state of an application matrix.

14. The distributed computing system of claim 9, wherein the automation infrastructure automatically updates the one or more rules engines to monitor the execution of the software applications when deployed to the application nodes in accordance with a current state of the application matrix.

Dkt. No. 208-6 at 36:25-49; 37:9-13, 17-21, 31-35.

DISCUSSION

I. LEGAL STANDARDS

Rule 12(c) provides that “[a]fter the pleadings are closed -- but early enough not to delay trial -- a party may move for judgment on the pleadings.” Fed. R. Civ. P. 12(c). Rule 12(c) and Rule 12(b)(6) motions are functionally identical, and so the standards for a Rule 12(b)(6) motion apply to a Rule 12(c) motion. *See Gregg v. Hawaii*, 870 F.3d 883, 887 (9th Cir. 2017). The Court takes as true the plausible and nonconclusory factual allegations in the complaint, and draws all reasonable inferences from those allegations in plaintiffs’ favor. *See Herrera v. Zumiez, Inc.*, 953 F.3d 1063, 1068 (9th Cir. 2020). A Rule 12(c) motion may be granted when there is no issue of material fact in dispute and the moving party is entitled to judgment as a matter of law. *See Fleming v. Pickard*, 581 F.3d 922, 925 (9th Cir. 2009). Rule 12(b)(6) and Rule 12(c) motions

generally are confined to the four corners of the complaint, and any materials it incorporates. *See Lee v. City of Los Angeles*, 250 F.3d 668, 688 (9th Cir. 2001).

“Challenges to patentability under Section 101 may be brought based solely on the pleadings, including on a Rule 12(c) motion for judgment on the pleadings.” *Open Text S.A. v. Box, Inc.*, 78 F. Supp. 3d 1043, 1045 (N.D. Cal. 2015); *see also Broadcom Corp. v. Netflix Inc.*, 598 F. Supp. 3d 800, 804-05 (N.D. Cal. 2022) (hereinafter *Broadcom II*). “[E]valuation of a patent claim’s subject matter eligibility under § 101 can proceed even before a formal claim construction.” *Genetic Techs. Ltd. v. Merial L.L.C.*, 818 F.3d 1369, 1374 (Fed. Cir. 2016); *see also Aatrix Software, Inc. v. Green Shades Software, Inc.*, 882 F.3d 1121, 1125 (Fed. Cir. 2018). Even so, the question of eligibility may be determined at the pleadings stage “only when there are no factual allegations that, taken as true, prevent resolving the eligibility question as a matter of law.” *Aatrix*, 882 F.3d at 1125 (citing *FairWarning IP, LLC v. Iatric Sys., Inc.*, 839 F.3d 1089, 1097 (Fed. Cir. 2016)); *see also Cellspin Soft, Inc. v. Fitbit, Inc.*, 927 F.3d 1306, 1320 (Fed. Cir. 2019). So too for the element of an inventive concept, which may raise a question of fact that can be resolved in a motion to dismiss only if the answer may be found in the complaint, the patent, and matters subject to judicial notice. *See Aatrix*, 882 F.3d at 1128; *Juniper Networks Inc. v. Swarm Tech. LLC*, No. 20-cv-03137-JD, 2022 WL 3031211, at *3 (N.D. Cal. Aug. 1, 2022).

To be sure, a patentee cannot avoid dismissal for ineligible claims purely on the basis of conclusory or generalized statements, and fanciful or exaggerated allegations that later prove to be unsupported may lead to fee shifting or other sanctions. *See Cellspin*, 927 F.3d at 1317 (“While we do not read *Aatrix* to say that any allegation about inventiveness, wholly divorced from the claims or the specification, defeats a motion to dismiss, plausible and specific factual allegations that aspects of the claim are inventive are sufficient.”); *see also Broadcom II*, 598 F. Supp. 3d at 805. The inquiry in a motion to dismiss is typically confined to the contents of the complaint and the plain words of the patent that is incorporated by reference. *See Linquet Techs., Inc. v. Tile, Inc.*, 559 F. Supp. 3d 1101, 1106 (N.D. Cal. 2021). To the extent claim construction issues might arise, the Court will adopt the patentee’s proposed constructions. *See Aatrix*, 882 F.3d at 1125;

1 *IPLearn-Focus, LLC v. Microsoft Corp.*, No. 14-cv-00151-JD, 2015 WL 4192092, at *3 (N.D.
2 Cal. July 10, 2015), *aff'd*, 667 F. App'x 773 (Fed. Cir. 2016).

3 Broadcom takes issue with the timing of Netflix's Rule 12(c) motion, but otherwise does
4 not object to answering the Section 101 question in this context and has not meaningfully
5 endeavored to identify any factual disputes that might make resolution on the pleadings
6 inappropriate. Neither side has called for claim construction as part of the eligibility inquiry, and
7 no construction disagreements were identified in the briefs or arguments. Consequently, subject to
8 the Rule 12(c) timing issue addressed in a later section, the Section 101 inquiry may properly be
9 made at this stage of the case.

10 The scope of patentable subject matter includes "any new and useful process, machine,
11 manufacture, or composition of matter, or any new and useful improvement thereof." 35 U.S.C.
12 § 101. The "laws of nature, physical phenomena, and abstract ideas" are "specific exceptions to
13 § 101's broad patent-eligibility principles." *Bilski v. Kappos*, 561 U.S. 593, 601 (2010) (internal
14 quotations and citation omitted). These exclusions are intended to guard against undue
15 preemption of innovation and invention. *See Alice*, 573 U.S. at 216 (citing U.S. Const., Art. I, § 8,
16 cl. 8). The Court must "distinguish between patents that claim the building blocks of human
17 ingenuity and those that integrate the building blocks into something more," because overbroad
18 patent protection "would risk disproportionately tying up the use of the underlying ideas." *Id.* at
19 217 (cleaned up).

20 In *Alice*, the Supreme Court set out a two-part test for Section 101. First, the Court
21 determines "whether the claims at issue are directed to a patent-ineligible concept" such as an
22 abstract idea, law of nature, or natural phenomenon. *Id.* at 218; *see also Int'l Bus. Machines Corp.*
23 *v. Zillow Grp., Inc.*, 50 F.4th 1371, 1377 (Fed. Cir. 2022). It is often "sufficient to compare claims
24 at issue to those claims already found to be directed to an abstract idea in previous cases" for
25 purposes of the step one analysis. *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1334 (Fed. Cir.
26 2016); *see also Alice*, 573 U.S. at 221 ("In any event, we need not labor to delimit the precise
27 contours of the 'abstract ideas' category in this case. It is enough to recognize that there is no
28 meaningful distinction between the concept of risk hedging in *Bilski* and the concept of

intermediated settlement at issue here.”). In addition, the Court may take into account undisputed facts about well-known practices that have stood the test of time. *See Yu v. Apple, Inc.*, 1 F.4th 1040, 1045-46 (Fed. Cir. 2021); *Juniper Networks*, 2022 WL 3031211, at *4.

The “purely functional nature of the claim confirms [whether the patent] is directed to an abstract idea, not to a concrete embodiment of that idea.” *Affinity Labs of Tex., LLC v. Amazon.com, Inc.*, 838 F.3d 1266, 1269 (Fed. Cir. 2016); *see also SAP Am., Inc. v. InvestPic, LLC*, 898 F.3d 1161, 1167 (Fed. Cir. 2018) (describing “abstract” as turning on “the specificity required to transform a claim from one claiming only a result to one claiming a way of achieving it”). Oversimplifying the claims should be avoided because “[a]t some level, ‘all inventions . . . embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas.’” *Alice*, 573 U.S. at 217 (second alteration in original) (citation omitted). For the technology at stake here, the relevant inquiry is “whether the claims are directed to an improvement to computer functionality versus being directed to an abstract idea.” *Enfish*, 822 F.3d at 1335; *see also BSG Tech LLC v. BuySeasons, Inc.*, 899 F.3d 1281, 1287 (Fed. Cir. 2018) (“For an application of an abstract idea to satisfy step one, the claim’s focus must be on something other than the abstract idea itself.”).

If a patent is directed to a patent-ineligible concept, the second step in *Alice* is to look for an “‘inventive concept’ -- *i.e.*, an element or combination of elements that is sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself.” *Alice*, 573 U.S. at 217-18 (alteration in original) (internal quotations and citation omitted); *see also Coop. Ent., Inc. v. Kollektive Tech., Inc.*, 50 F.4th 127, 130 (Fed. Cir. 2022). This step asks, “[w]hat else is there in the claims before us?” *Mayo Collaborative Servs. v. Prometheus Lab’ys, Inc.*, 566 U.S. 66, 78 (2012). The answer must include something “significantly more” than the abstract idea itself. *BSG Tech*, 899 F.3d at 1290. “It is well-settled that mere recitation of concrete, tangible components is insufficient to confer patent eligibility to an otherwise abstract idea. Rather, the components must involve more than performance of “‘well-understood, routine, conventional activit[ies]” previously known to the industry.” *In re TLI Commc’ns LLC Patent Litig.*, 823 F.3d 607, 613 (Fed. Cir. 2016) (alteration in original) (quoting *Alice*, 573 U.S. at 225).

In addition, merely reducing an abstract concept to a particular technical platform is not enough to provide the inventive element needed to support a patent. *See Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1354 (Fed. Cir. 2016); *TriDim Innovations LLC v. Amazon.com, Inc.*, 207 F. Supp. 3d 1073, 1080 (N.D. Cal. 2016). “If a claim’s only ‘inventive concept’ is the application of an abstract idea using conventional and well-understood techniques, the claim has not been transformed into a patent-eligible application of an abstract idea.” *BSG Tech*, 899 F.3d at 1290-91.

II. TIMING OF NETFLIX’S RULE 12(c) MOTION

Broadcom says that Netflix’s Rule 12(c) motion for judgment on the pleadings should be denied because it was filed prematurely. *See* Dkt. No. 296 at 1. A Rule 12(c) motion may be filed “[a]fter the pleadings are closed.” Fed. R. Civ. P. 12(c). The parties have exchanged a number of amended complaints and answers as this lawsuit has unfolded. The operative answer filed by Netflix had not caught up with the Court’s order lifting the stay of the three patents in question here. *See* Dkt. No. 260 ¶¶ 189-208, 286-355; Dkt. No. 285. Broadcom contends that Netflix is seeking to “gain a litigation advantage” by moving at this time. Dkt. No. 296 at 2. Netflix says that the motion is “proper because ‘the pleadings are closed for purposes of Rule 12(c) once a complaint and answer have been filed.’” Dkt. No. 297 at 10 (quoting *Doe v. United States*, 419 F.3d 1058, 1061 (9th Cir. 2005)). In the alternative, Netflix asks that the motion for judgment on the pleadings be construed as a motion to dismiss under Rule 12(b)(6). *See id.* at 10 n.10.

Denial of the Rule 12(c) motion is not warranted on timeliness grounds. Broadcom asks the Court to stand on ceremony in a manner that will not make a whit of difference in this litigation, and will certainly not prejudice Broadcom in any way. Netflix has now filed an answer responsive to Broadcom’s claims for the patents in dispute here. *See* Dkt. No. 347. It may be that, strictly speaking, Netflix filed this motion a tad early, but the pleadings are now shipshape, and there is no good reason to go through the formalistic exercise of terminating the motion just for Netflix to refile it. Broadcom has not identified any prejudice from the sequencing of the filings, or suggested that the resolution of the issues raised by Netflix’s motion depends in any way on

Netflix’s amended answer. Sustaining Broadcom’s objection would only cause needless delay by drawing out the inevitable.

III. THE ’722 PATENT

A. Claim 1 Is Directed to an Abstract Idea

Claim 1 recites, in pertinent part, a method comprising (1) “collecting performance data for one or more application instances, wherein the performance data is associated with the performance of said one or more application instances”; (2) “detecting one or more instance life cycle events associated with said one or more application instances”; (3) “correlating said performance data to said . . . instance life cycle events”; and (4) “storing the correlated performance data.” Dkt. No. 208-11 at 9:64-67; 10:1-13. An “application instance” is a “computer program executing on a computer system,” *id.* at 10:2-3, and an “instance life cycle event” is the creation, destruction, or migration of an application instance, *id.* at 10:6-10.

The language of Claim 1, along with the specification, show that it is directed to the abstract idea of gathering, correlating, and storing information. Processes are directed to an abstract idea where they are “the sort of process that ‘can be performed in the human mind, or by a human using a pen and paper.’” *Ericsson Inc. v. TCL Commc’n Tech. Holdings Ltd.*, 955 F.3d 1317, 1327 (Fed. Cir. 2020) (quoting *CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1372 (Fed. Cir. 2011)). Netflix offers the illustration of an elementary school science project in which the student monitors the growth (“performance data”) of several plants (“application instances”) over time, correlates the plants’ measurements with stages in the plants’ life cycles -- such as when they are planted and when the seedlings are moved to larger pots (“instance life cycle events”) -- and records the data in a notebook. *See* Dkt. No. 287 at 4. Other examples abound. An educator might track students’ progress in multiple subject areas across time, and correlate that performance (*e.g.*, testing data) with different milestones in the students’ careers (*e.g.*, completion of an academic year, graduation, or their first year at a new school). A transportation planner might track the on-time performance of a train car throughout its useful life, identify events associated with the car’s life cycle -- being placed in service, undergoing repairs,

1 and being designated for replacement -- and then correlate the on-time performance with the
2 different life cycle events.

3 The purely functional language of Claim 1 confirms that the claim is directed to an abstract
4 idea. In *Two-Way Media Ltd. v. Comcast Cable Communications, LLC*, the Federal Circuit
5 concluded that a claim using only result-based functional language was directed to an abstract
6 idea. *See Two-Way Media*, 874 F.3d 1329, 1337 (Fed. Cir. 2017). So too, here. Claim 1 uses
7 functional language like “collecting,” “detecting,” “correlating,” and “storing,” without reciting
8 how those results are accomplished.

9 Broadcom presses *Enfish* to suggest that Claim 1 is a patentable improvement of computer
10 functionality. *See Enfish*, 822 F.3d at 1327. It emphasizes that the term “application instance”
11 appears “no less than seven times in claim 1 alone.” Dkt. No. 296 at 5. In a similar vein,
12 Broadcom’s expert says that “[a]ssociating this application-based monitoring solution with
13 monitoring the growth of a plant is oversimplifying the claimed invention to an absurd degree.”
14 Dkt. No. 296-1 ¶ 24. But merely saying with emphasis that the ’722 patent is directed to solving a
15 problem in computing or distributed computing systems does not, in itself, make it so. The
16 abstract idea of collecting and correlating data is a common one in human enterprise and
17 experience. Without more, namely without some specific, concrete innovation, the idea remains
18 abstract. *See Broadcom Corp. v. Netflix Inc.*, No. 20-cv-04677-JD, 2021 WL 4170784, at *7
19 (N.D. Cal. Sept. 14, 2021) (hereinafter *Broadcom I*) (“Implementing an old practice in a new
20 environment does not convert an otherwise abstract idea into something patentable.”) (citing *Simio*
21 *LLC v. FlexSim Software Prods., Inc.*, 983 F.3d 1353, 1360 (Fed. Cir. 2020)). Broadcom has
22 pointed to nothing in the ’722 patent that “suggests that it functions differently from other
23 conventional systems, or provides a technological solution to a technological problem.” *Id.*

24 **B. Claim 1 Lacks an Inventive Concept**

25 Turning to step two, Claim 1 “does not include an inventive concept sufficient to transform
26 the claimed abstract idea into a patent-eligible invention.” *Yu*, 1 F.4th at 1045. “[A]n inventive
27 concept must be evident in the claims.” *Two-Way Media*, 874 F.3d at 1338. Contrary to
28 Broadcom’s suggestion, *see* Dkt. No. 296 at 7, Claim 1 uses a conventional ordering of functional

elements: collecting multiple sets of data related to a given phenomenon, then correlating the data, and finally storing it.

Broadcom says the claim embodies an inventive concept because the '722 patent "explains that prior monitoring systems for distributed-computing systems were not focused on monitoring and tracking life-cycle events such as application instance creation, migration, and destruction, nor did they correlate performance data with such events." Dkt. No. 296 at 7. Broadcom suggests that the '722 patent "claims specific, novel ways to address" the "technical challenges" associated with tracking life cycle events and correlating them with performance data. Dkt. No. 208 ¶ 332.

The problem for Broadcom is that these allegations "are entirely conclusory and do not explain what is unconventional about" the method being claimed. *Broadcom III*, 2022 WL 3155410, at *2. Broadcom has not pointed to any other non-conclusory allegations in the TAC or to portions of the '722 patent that establish an inventive concept in Claim 1.¹ For the same reason, Broadcom's cursory and undeveloped suggestion that there are factual disputes about inventiveness is unavailing. *See Linquet Techs.*, 559 F. Supp. 3d at 1110.

IV. THE '976 PATENT

A. Claims 1 and 9 Are Directed to Abstract Ideas

Claim 1 recites, in pertinent part, a method for connecting to a web service that comprises (1) "selecting a web service"; (2) "selecting a server among one or more servers capable of running the selected web service, the selected server being selected independent of input from a requesting application subsequent to selection of the web service"; (3) "determining a real address for the selected web service running on the selected server"; and (4) "connecting to the selected web service running on the selected server using the determined real address." Dkt. No. 208-10 at

¹ Broadcom says that the expert declaration it filed in support of its opposition to the instant motion shows that the '722 patent's "inventions are non-conventional." Dkt. No. 296 at 7 (citing Claim 1 and Dkt. No. 296-1 ¶¶ 24, 27). Broadcom does not meaningfully explain how the declaration supports its case, and its attempt to simply incorporate its expert's discussion by reference is debatably improper. In any event, the cited portions of the expert declaration add nothing to the conclusory allegations Broadcom makes elsewhere. *See, e.g.*, Dkt. No. 296-1 ¶ 27 ("[I]n my opinion, the elements of claims 1, 3, and 4 are combined so as to claim an inventive concept. For example, claims 1, 3, and 4 recite a specific combination of steps that, on my experience in the field, was not routine and conventional as of the priority date of the '722 Patent.").

8:55-62. “Web services are software systems that can be identified by Universal Resource Identifiers (URI) in a fashion that is analogous to the way websites may be identified by Uniform Resource Locators (URLs).” *Id.* at 1:19-23. The ’976 patent discusses how the “Universal Description, Discovery and Integration (UDDI) standards have been adopted” to facilitate software systems’ ability to locate and connect to web services. *Id.* at 1:39-40. “UDDI also provides for UDDI repositories which are generally directories where information pertaining to a business, its services, technical information, and information about specifications for the business’s web services can be looked up.” *Id.* at 1:42-46. These UDDI repositories “may be used to help users and software systems locate and utilize available web services,” and “may additionally be used to manage web service load.” *Id.* at 4:1-5.

Dependent Claim 9 builds on Claim 1 by reciting that “selecting a server among one or more servers capable of running the selected web service” comprises (a) “becoming aware of the status of a primary server of the one or more servers capable of running the selected web service”; (b) selecting the primary server when the primary server has a status of functional”; and (c) “selecting a secondary server of the one or more servers capable of running the selected web service when the primary server has a status of non-functional.” *Id.* at 9:13-21.

Claims 1 and 9 are directed to two abstract ideas. The first is using an index to retrieve information about web services. The specification itself mentions that the search and selection of a web service may “consist of looking up a web service in an index of web services, similar to the way a person might look up a phone number in a phonebook.” *Id.* at 5:22-24. It goes on to mention that “[s]uch indexes may allow for yellow pages type search, where the requesting application . . . may identify an appropriate web service using a set of web service descriptions organized topically.” *Id.* at 5:24-27. Indexes have been used to facilitate access to information for centuries:

[Scholar Dennis] Duncan locates the origins of the index in the 13th century, when the English polymath Robert Grosseteste . . . created his “Tabula,” so that he could efficiently access the many sources for his vast store of knowledge. The “Tabula was ordered conceptually, broken down into 440 topics, starting with God. It was a device born of necessity, bringing “cosmos out of chaos,” Duncan writes. “An encyclopedic mind needs an encyclopedic index to provide it with structure.”

Jennifer Szalai, *A Smart, Playful Book About the Underappreciated Index*, N.Y. Times (Feb. 9, 2022), <https://www.nytimes.com/2022/02/09/books/review-index-history-of-dennis-duncan.html> (reviewing Dennis Duncan’s *Index, A History of the*). Such a “‘fundamental [and] long prevalent’” concept is a quintessential abstract idea. *Intell. Ventures I LLC v. Symantec Corp.*, 838 F.3d 1307, 1314 (Fed. Cir. 2016) (quoting *Alice*, 573 U.S. at 219).

The second abstract idea behind Claims 1 and 9 is directing requests for web services to an available web server. If the first-choice (primary) server is available, it is selected. If not, an available secondary server is selected -- this is the concept of “failover,” which was already known in the art. *See* Dkt. No. 208-10 at 2:53-57 (“[A]nother option for handling the problem of excess load is to use a failover. A failover may be a redundant or standby server that can automatically take over for the primary server in the event the primary server fails.”). This basic process for routing server requests is analogous to both Claim 1 of the ’183 patent, which was “drawn to the abstract idea of allocating tasks across a system of servers,” *Broadcom II*, 598 F. Supp. 3d at 807, and Claim 1 of the ’079 patent, which was “directed to the abstract idea of measuring data traffic and rebalancing traffic flow,” *Broadcom I*, 2021 WL 4170784, at *6.

Broadcom suggests that the asserted claims are directed to a non-abstract computer functionality improvement. *See* Dkt. No. 296 at 8-11. Broadcom emphasized in its opposition papers and at the motion hearing the limitation “of claim 9 (via claim 1) that requires ‘the selected server to be selected independent of input from a requesting application subsequent to selection of the web service.’” *Id.* at 9 (cleaned up) (quoting Dkt. No. 208-10 at 8:57-59); *see also* Dkt. No. 312 at 22-23. That is, a requesting application may “optionally contact[] a proxy” to select an appropriate web server. Dkt. No. 287 at 9 (citing, *e.g.*, Dkt. No. 208-10 at 4:10-33). Broadcom says that this feature provides “greater operational control and visibility over the load balancing and failover techniques used to provide web services,” *id.*, and that it improves efficiency by “allow[ing] a smaller, less expensive system to do the work that would otherwise be required for a larger, more expensive system,” *id.* at 11.

An improvement in efficiency “can be a non-abstract computer-functionality improvement if done by a specific technique that departs from earlier approaches to solve a specific computer

problem.” *Ancora Techs., Inc. v. HTC Am., Inc.*, 908 F.3d 1343, 1348 (Fed. Cir. 2018). But the allegations in the TAC are entirely conclusory on this score. *See* Dkt. No. 208 at ¶ 298 (“The ’976 Patent claims specific, novel ways to address these technical challenges through methods, systems, and apparatuses that enable the efficient, effective provision of web services using multiple servers.”). Broadcom cites nothing in the patent that discusses, in non-conclusory fashion, how the claimed method departs from earlier approaches to solve a specific problem in computing.

In addition, the concept of using an intermediary to route traffic to available options is itself abstract and generic. A business could make its phone directory public and allow customers to directly contact any employee, but it would be taking the risk that the heads of the different departments would be flooded with calls. The better, time-tested approach is to interpose an operator who screens incoming calls and ensures that they are distributed to available employees in an efficient manner. Broadcom has not adequately explained how the limitations incorporated in Claim 9 involve anything more than the application of this abstract idea in the computing context.

B. Claims 1 and 9 Lack an Inventive Concept

Claims 1 and 9 do not “include an inventive concept sufficient to transform the claimed abstract idea[s] into a patent-eligible invention.” *Yu*, 1 F.4th at 1045. The claims recite a conventional ordering of functions: first selecting a web service to run, then identifying a web server that is available to run the web service, and finally connecting to that web service. *See* Dkt. No. 208-10 at 8:55-62. These functions are performed using conventional components: web services, servers, and applications. “Nothing in the claims . . . requires anything other than conventional computer and network components operating according to their ordinary functions.” *Two-Way Media*, 874 F.3d at 1339. Using an intermediary to screen and direct web service requests is a “perfectly conventional” solution to the familiar problem of traffic balancing. *Intell. Ventures*, 838 F.3d at 1321.

Broadcom does not seriously dispute these conclusions. It does not point to any allegations in the TAC to defend its position, nor does it discuss any of the language in the claims themselves. *See* Dkt. No. 296 at 11-12. Broadcom’s *Alice* step-two argument rests on the fact that

the “PTAB previously considered Netflix’s presentation of the prior art and found that claims 9 and 22 were not disclosed in the prior art cited by Netflix.” *Id.* at 12. But merely citing the result of a PTAB proceeding that was directed to a different inquiry is not enough. Broadcom has not plausibly alleged that the claims of the ’976 patent contain an inventive concept.

V. THE ’138 PATENT

A different outcome is warranted for the ’138 patent. The asserted claims of the ’138 patent are directed to a method for storing and distributing virtual-machine resources within a distributed computing environment.

Netflix says that the patent “claims the abstract idea of automatically distributing software from a repository to computers.” Dkt. No. 287 at 11. In Netflix’s view, this is “a task that has long been performed by network administrators,” and the “concept of storing and distributing information long predates computers.” *Id.* at 12. Broadcom says that there is more to the patent: “Netflix’s summary characterization reads out of the claim the ‘automation infrastructure,’ the autonomic functionality of the claimed control node, and the layered deployment of image instances for both a virtual machine manager and applications.” Dkt. No. 296 at 13 (emphasis omitted).

The specification describes a well-defined technical problem, and Broadcom has plausibly alleged that the ’138 patent provides a technical solution to it. *See Packet Intel. LLC v. NetScout Sys., Inc.*, 965 F.3d 1299, 1309 (Fed. Cir. 2020); *see also DDR Holdings, LLC v. Hotels.com, LP*, 773 F.3d 1245, 1257 (Fed. Cir. 2014) (finding a claim non-abstract where “the claimed solution [wa]s necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks”). The idea to use a virtual machine -- “software that creates an environment that emulates a computer platform” -- is itself not new. Dkt. No. 208-6 at 33:1-2; *see also id.* at 33:2-6 (“For example, virtual machines provide environments on which guest operating systems (OS) execute as [though] the operating systems were operating directly on a physical computing platform.”). But efficiently managing and deploying virtual machines within a complex distributed computing environment is another matter, and the asserted claims of

the '138 patent offer enough of a roadmap for how to handle that problem, without relying solely on results-based functional language.

Because the asserted claims of the '138 patent are directed to a non-abstract improvement in computer functionality, they are patent eligible under Section 101 and *Alice*. It bears mention that the Court's conclusions are based on a reading of the TAC in the Rule 8 and Rule 12(c) context. Netflix may file a renewed challenge at a later stage in this litigation if it obtains (or has obtained) facts in discovery that give rise to a good-faith basis for revisiting the eligibility question.

CONCLUSION

Because the '722 patent and '976 patent are directed to abstract ideas and lack inventive concepts, the tenth and eleventh claims in the TAC are dismissed. In light of the plain language of the claims in the patents, Broadcom may face a challenge in amending the infringement allegations. Even so, an opportunity to amend will be provided. *See Broadcom I*, 2021 WL 4170784, at *12. Given that dispositive motion and trial deadlines are rapidly approaching, Broadcom may file an amended complaint consistent with this order by June 23, 2023. Failure to meet this deadline will result in dismissal with prejudice of the tenth and eleventh claims under Rule 41(b).

Because the '138 patent is not directed to an abstract idea, Netflix's motion to dismiss the sixth claim for relief is denied.

IT IS SO ORDERED.

Dated: June 12, 2023



JAMES DONATO
United States District Judge